## ☐ ThomasCarstens / SelfStudyIRM

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and method calls to jump to their definitions or references in the same repository. Learn more

```
import numpy as np
     import math
     import test
     import matplotlib.pyplot as plt
     import statistics#a importer
     def openfile():
         fh = open("testFile.txt", 'rw')
         fh.write("dslfk")
         fh.close()
10
         #with open("test2File", 'rw') as fh:
         # fh.write("ooo")
         a = 'hello \"world\"'
14
         print (a)
     def helloworld():
         print ("Hello World")
     #helloworld()
20
     def listints():
```

```
for i in range(101):
             print i
     def userinput():
         a = input()
         print a
28
     def userreps():
30
         reps = input()
         #print reps
         for i in range(reps):
             print ("HQ")
34
     #userreps()
     def logvalue():
         value = input()
38
         logvalue = math.log(value,10)
40
         print logvalue
41
42
     #logvalue()
43
44
     def regurgitate():
45
         store = []
46
         a = 0
47
         if not a:
48
             a = input()
49
             store.append(a)
50
             print(store)
         print(store) #??????
         for i in store.size():
             print(store.pop())
     regurgitate()
56
     def patt():
58
         store = {}
         a = 0
         for i in range(5):
             a[i] = input()
             #store.append(a)
             print(store)
64
         print(store) #??????
65
         for i in range(store.size()):
             print(store.pop())
67
     #patt()
68
     # if 1 in a: etc.
70
     #def sort():
         #a.sort() #sort se fait "in-place"
     #a=input.lower()
```

```
74
     for char in a:
         if char in frea
             freq[char += 1
             print(char)
78
         else:
80
81
     #Write a program that checks of two lists
82
     #have at least 1 element in common
83
     #LIST OF CHARACTERS TO STRING.
84
     "".join(a)
     "-".join(a)
87
88
     #TUPLES
89
     def f(*arg): # kargs
90
         print(arg)
     # arguments sont tuples avant de rentrer dans
     # la fonction.
     f(1,2)
94
     #PAR DEFAUT
     def f(arg1, arg2=3):
98
     #DICTIONNAIRE D'ARGUMENTS
     #needs looking into
     f(1, name=3, ok=True)
     f(1, name=3)
     #Write a function that takes an arbitrary amount of arguments and returns the sum of
     #these arguments.
     #sum
     #moyenne
     #stddev
     def sum(*args):
         return sum(args)
     def f(*args)
         return sum(args, statistics.mean(args, statistics.stdebv(args)))
     import json
     #from PYTHON DICT TO JSON
     a = {
         'a': 42
     s = json.dumps(a)
         disc_python=json.loads("""
             a:1
         }
```

```
#TRY-EXCEPT BLOCK: TO MANAGE ERROS
128
         a=1/0
130
     except Exception as err:
         print("On a eu une erreure.")
         #optionel: print(err)
     A VERIFIER: CLASSE
     class Maison:
         def __init__(self, nb_pieces):
             self.nb pieces = nb pieces
             self.record = {
                           "name": 3,
                           "balance": 100,
                           "transaction":[100]
         def __getitem__(self, key):
            if key in self.record:
                return self.record[key];
                print (self.record[key])
            else:
                return "No such category."
         def __setitem__(self, key, value):
            if key in self.record:
                self.record[key]= value
                return "No such category."
         def afficher_nb_pieces(self):
             print(self.nb_pieces)
     m1 = Maison(3)
     #print(m1.nb_pieces)
     #m1.afficher_nb_pieces()
     m1[0]= "oui"
     m1[2]
     GENERATEUR: garder l'etat interne fonction
     def f():
        i=0
        while True:
174
           yield i #conserve etat interne fonction
           i += 1
     gen = f()
     print(next(gen))
```

```
print(next(gen))
180
      return a if var else b
      dont l'exemple avec if .. in ..
      NEW WAY OF DISPLAYING LOOPS
      1 = [i for i in range(10)]
      []<var> for <var> in <iter> (condition)]
      #GREGOR
      class NoneDico:
      def __init__(self):
190
      self.dico = {}
      def __getitem__(self, key):
      return self.dico[key] if key in self.dico else None
      def __setitem__(self, key, value):
      self.dico[key] = value
198
      #GREGOR
200
      class Readable():
201
      def init (self, nb pages, title, author="Unknown"):
      self.nb pages = nb pages
      self.title = title
      self.author = author
      def read(self):
206
      print("Reading "+str(self.nb pages)+" pages from "+self.author)
208
209
      class Book(Readable):
210
      def __init__(self, nb_pages, title, author):
      super().__init__(nb_pages, title, author)
      class Magazine(Readable):
214
      def __init__(self, nb_pages, title):
      super().__init__(nb_pages, title)
      b = Book(42, "L'assomoir", "Zola")
      m = Magazine(111, "Voici")
      b.read()
      m.read()
220
      #GREGOR
      import math
      def f(i):
      i = math.log(i) + math.sqrt(i)
     i /= 24
      i = i \ll 2
228
      return i
```

```
230
     l = [f(i) \text{ for } i \text{ in range}(10)]
      #[<var> for <var> in <iter> (condition)]
      ####
      def intervalles():
          #https://numpy.org/doc/stable/reference/generated/numpy.linspace.html
238
          evenly=np.linspace(0, 100)
          print(evenly)
      #intervalles()
      def graph():
          for i in range (100):
               x1 = i
              y1=2*x1
246
              plt.plot(x1, y1, 'bo')
247
               plt.show()
248
      graph()
```